

## USING BLOCKS TO SOLVE EQUATIONS A HANDS-ON APPROACH

### Blocks:

Tan = positive 1      Red = negative 1      One Tan and One Red = 0 (they cancel out)

Shape/Pattern blocks = the variables

Remember that whatever you do to one side of the equation, you must do to the other!!

**Solve the following equations using blocks:**

1.  $5x + 3 = 8$

2.  $3x - 4 = 2$

3.  $2(2x + 1) = 10$

4.  $3x + 11 = 4x + 2$

5.  $2x - 6 = 5x + 3$

6.  $3(x - 4) = 9$

**Solve the equations using blocks. Write out each step with algebra symbols to show the solution to the equation.**

7.  $4x + 2 = 6x - 7$

8.  $9 + 4x = -3$

9.  $7 = 4(x - 2)$

10.  $6x - 4 = 8$

11.  $3x - 1 = 5x + 3$

12.  $3(2x + 2) = 4$

# Mixed Equations

Name: \_\_\_\_\_ Date: \_\_\_\_\_



Solve the equations.

(1)  $\frac{7x - 6}{-8} = 6$

(2)  $-2x + 6(2x + 11) = 136$

(3)  $-x + 85 = -190 + 10x$

(4)  $-88 = -4x - 2(-7x + 4)$

(5)  $-47 + 6x = 31$

(6)  $10(5x + 2) = -580$

(7)  $6x - 57 = 11x + 28$

(8)  $-22 = -3x + 23$

(9)  $117 = 2x - 3(-5x + 12)$

(10)  $9x - 49 = 12x + 38$